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10/668,557	09/23/2003	Sankaralingam Ramraj	2003 P 09371 US	2582
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Siemens Corporation Intellectual Property Department 170 Wood Avenue South Iselin, NJ 08830			EXAMINER SQUIRES, ELIZA A	
			ART UNIT 3626	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/668,557

**Applicant(s)**

RAMRAJ ET AL.

**Examiner**

Eliza Squires

**Art Unit**

3626

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 August 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10, 13, 19-22, 26-29, 32 and 34-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10, 13, 19-22, 26-29, 32 and 34-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

Claims 1-10, 13, 19-22, 26-29, 32 and 34-40 are currently pending in the application.

#### ***Response to Arguments***

1. Applicant's arguments, see Remarks, filed 8/12/2009, with respect to the rejection(s) of claim(s) 1-10, 13, 19-22, 26-29, 32, and 34-40 under 35 USC 102 and 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of the previously presented *Sweeney* and *Scrub System*.

#### ***Response to Amendment***

The amendment filed 03/16/2009 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

2. Claims 29, 34, and 36 recite "wherein the alphabet portion of data comprises a first number of alphabet characters; and
3. wherein modifying the alphabet portion of data comprises replacing the alphabet portion of the data with a second number of replacement characters, the second number being selected independent of the first number, the replacement characters being selected independent of the alphabet characters."
4. There is no support in the specification for replacing the alphabet data with a number of replacement characters being selected independent of the alphabet characters. See paragraph [0026] where "scrambling the patient data (such as by replacing the patient data with different

characters, such as XXX)”. Secondly there is no step in the originally filed specification for selecting a number of characters.

5. Claims 38, 39, and 40 require selecting a predetermined number of replacement characters. The Examiner could not find support for a predetermined number of replacement characters in the specification as originally filed.

6. Applicant is requested to clarify the issues discussed above, to specifically point out support for the newly added limitations in the originally filed specification and claims to the extent possible, and to cancel any new matter in the reply to this Office Action.

***Specification***

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

8. The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

9. The specification is objected to under 35 USC 112, first paragraph for at least the same rationale as discussed above, and incorporated herein.

10. As to Claims 29, 34, and 36. There is no support in the specification for replacing the alphabet data with a number of replacement characters being selected independent of the alphabet characters. See paragraph [0026] where “scrambling the patient data (such as by replacing the patient data with different characters, such as XXX)”. Secondly there is no step in the originally filed specification for selecting a number of characters.

11. Claims 38, 39, and 40 require selecting a predetermined number of replacement characters. The Examiner could not find support for a predetermined number of replacement characters in the specification as originally filed.

***Claim Rejections - 35 USC § 112***

12. Claim(s) 29, 34, 36, and 38-40 is/are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

13. As per claim(s) 29, 34, 36, and 38-40, these claims are rejected for at least the same rationale as discussed above, and incorporated herein.

14. As to Claims 29, 34, and 36. There is no support in the specification for replacing the alphabet data with a number of replacement characters being selected independent of the alphabet characters. See paragraph [0026] where “scrambling the patient data (such as by replacing the patient data with different characters, such as XXX)”. Secondly there is no step in the originally filed specification for selecting a number of characters.

15. Claims 38, 39, and 40 require selecting a predetermined number of replacement characters. The Examiner could not find support for a predetermined number of replacement characters in the specification as originally filed.

16. NOTE: The rejection presented hereinbelow is for Applicant's consideration should Applicant properly traverse the new matter issues discussed above in the response hereto.

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. **Claims 1-8, 10, 19-22, and 27-29, 32, and 34-40** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 7,269,578 to *Sweeney* in view of “Replacing Personally-Identifying Information in Medical Records, the Scrub System” by *Sweeney* hereinafter referred to as *Scrub System*.

5. **As to claim 1**, *Sweeney* discloses a method for checking for patient information in a data stream in a medical records system comprising:

transferring the data stream in the medical records system; extracting a portion of data from the data stream (column 5, lines 31-61 and column 6, lines 14-29);

automatically determining whether the portion of data comprises patient information (column 6, lines 30-62, column 5, lines 58-61, and figure 5); and

modifying the portion of data if it comprises patient information so that the modified portion of the data is independent of the patient information (column 6, lines 30-62, column 5, lines 58-61, and figure 5 wherein “444444444” is independent of “819491049”).

While *Sweeney* strongly suggests the use of sequences it does not explicitly disclose using comparisons to database sequences to determine Patient Health Information (PHI). *Scrub System* discloses automatically comparing the portion of data with a predetermined sequence in a database (page 3, table 3, Computer Approach section, and introduction).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify *Sweeney* with *Scrub System* in order to utilize an algorithm that identifies PHI which protects patient privacy and prevents the occurrence of HIPAA violations.

Furthermore, *Sweeney* does not explicitly teach alphabet data. *Scrub System* teaches replacing a patients name with a fictitious name. Examiner notes that the fictitious name is independent from the patients name as it “belong[s] to no known person”. Since each individual element and its function are shown in the prior art, albeit shown in separate references, the difference between the claimed subject matter and the prior art rests not on any individual element or function but in the very combination itself- that is in the substitution of alphabetic data in the *Scrub System* reference for the numeric data of the *Sweeney* patent.

Thus, the simple substitution of one known element for another producing a predictable result renders the claim obvious.

6. **As to claim 2**, see the discussion of claim 1. *Sweeney* further discloses the method wherein transferring the data stream in the medical records system comprises generating a report comprising the data stream (column 6, lines 21-29).
7. **As to claim 3**, see the discussion of claim 1. *Sweeney* further discloses the method wherein transferring the data stream in the medical records system comprises inputting the data stream into the medical records system (column 5, lines 58-61).
8. **As to claim 4**, see the discussion of claim 1. *Sweeney* further discloses the method wherein transferring the data stream in the medical records system comprises sending the data stream to a peripheral device (column 5, lines 53-58).

9. **With respect to claim 5**, see the discussion of claim 1, however, *Sweeney* does not explicitly disclose parsing. *Scrub System* discloses the method wherein extracting a portion of data from the data stream comprises parsing the data stream (page 1, computational architectures section, 1<sup>st</sup> paragraph).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify *Sweeney* with *Scrub System* in order to utilize a system that is capable of identifying various types of text within a document that may contain PHI in order to protect patient privacy and prevent HIPAA violations.

10. **With respect to claim 6**, see the discussion of claim 1, however, *Sweeney* does not explicitly disclose comparing data with a format. *Scrub System* discloses the method wherein automatically comparing the portion of data with a predetermined sequence in a database comprises automatically comparing the portion of data with a predetermined format (page 1, computational architectures section, 1<sup>st</sup> paragraph, page 3, table 3, and page 2, Computer Approach section).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify *Sweeney* with *Scrub System* in order to utilize a sequence identifying algorithm that identifies PHI which protects patient privacy and prevents the occurrence of HIPAA violations.

11. **As to claim 7**, see the discussion of claim 1, however, *Sweeney* does not explicitly disclose using rules to specify a sequence of characters. *Scrub System* discloses the method wherein automatically comparing the portion of data with a predetermined sequence in a database and determining whether the portion of data comprises patient information based on the



comparison comprises using rules to specify a sequence of characters that includes patient information (page 3, table 3, page 2, Computer Approach section, and page 1, introduction).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify *Sweeney* with *Scrub System* in order to utilize a sequence identifying algorithm that identifies PHI which protects patient privacy and prevents the occurrence of HIPAA violations.

12. **As to claim 8**, see the discussion of claim 1 and 7, additionally, *Sweeney* discloses the method wherein the rules comprise an expert system (column 7 lines 10-19).

13. **As to claim 10**, see the discussion of claim 1. *Sweeney* further discloses the method wherein modifying the portion of data comprises modifying content of the portion of data (column 7, lines 27-31).

14. **As to claim 19**, *Sweeney* discloses a computer-based system for monitoring patient information in a medical records system, said computer-based system comprising:

a transfer device for transferring a data stream in the medical records system (column 6, lines 14-29 and column 5 lines 58-61);

and determining whether the portion of the data stream comprises patient information and based on that comparison and modifying the portion of the data stream so that the modified portion of the data is independent of the patient information (column 6, lines 30-62, column 5, lines 58-61, and figure 5 wherein “44444444” is independent of “819491049”).

However, *Sweeney* does not explicitly disclose using comparisons to database sequences to determine PHI. *Scrub System* discloses a memory storing predetermined sequences of patient information (page 3, 2<sup>nd</sup> column 3<sup>rd</sup> and 4<sup>th</sup> paragraphs and table 3, and page 4, first paragraph); and

a processor being coupled to the memory and the transfer device, the processor comparing a portion of the data stream with at least one predetermined sequence in the memory and determining whether the portion of the data stream comprises patient information based on the comparison (page 2, Computer Approach section).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify *Sweeney* with *Scrub System* in order to utilize an algorithm that identifies PHI which protects patient privacy and prevents the occurrence of HIPAA violations.

Furthermore, *Sweeney* does not explicitly teach alphabet data. *Scrub System* teaches replacing a patients name with a fictitious name. Examiner notes that the fictitious name is independent from the patients name as it “belong[s] to no known person”. Since each individual element and its function are shown in the prior art, albeit shown in separate references, the difference between the claimed subject matter and the prior art rests not on any individual element or function but in the very combination itself- that is in the substitution of alphabetic data in the *Scrub System* reference for the numeric data of the *Sweeney* patent.

Thus, the simple substitution of one known element for another producing a predictable result renders the claim obvious.

15. **With respect to claim 20**, see the discussion of claim 19. *Sweeney* further discloses the computer-based system wherein the transfer device comprises an input device (column 5, lines 31-61).

16. **With respect to claim 21**, see the discussion of claim 19. *Sweeney* further discloses the computer-based system wherein the data stream comprises a generated report (column 5, lines

53-61, column 6, lines 14-29, and figure 5); and wherein the transfer device comprises an output device (column 5, lines 53-61).

17. **As to claim 22**, see the discussion of claim 20. *Sweeney* further discloses the computer-based system of claim 19, wherein the memory further comprises rules (column 7 lines 10-19).

However *Sweeney* does not explicitly disclose utilizing a sequence of characters. *Scrub System* discloses:

wherein the processor comparing a portion of data with at least one predetermined sequence in the memory and determining whether the portion of the data stream comprises patient information based on the comparison comprises using the rules to specify a sequence of characters that includes patient information (page 3, table 3, Computer Approach section, and page 1, introduction).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify *Sweeney* with *Scrub System* in order to utilize a sequence identifying algorithm that identifies PHI which protects patient privacy and prevents the occurrence of HIPAA violations.

18. **As to claim 27**, *Sweeney* discloses a computer-based system for monitoring patient information in a medical records system, said computer-based system comprising:

a transfer device for transferring a data stream in the medical records system (column 5, lines 31-61 and column 6, lines 14-29);

a processor being coupled to the memory and the transfer device, the processor determining at least one characteristic of the data stream, determining whether a portion of data comprises patient information based on the characteristic (column 6, lines 30-41), and

modifying the portion of data if it comprises patient information so that the modified portion of the data is independent of the patient information (column 6, lines 30-62, column 5, lines 58-61, and figure 5 wherein “444444444” is independent of “819491049”).

However, *Sweeney* does not explicitly disclose utilizing predetermined sequences. *Scrub System* discloses a memory storing predetermined sequences of patient information (page 3, table 3, Computer Approach section, and page 1, introduction).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify *Sweeney* with *Scrub System* in order to utilize an algorithm that identifies PHI which protects patient privacy and prevents the occurrence of HIPAA violations.

Furthermore, *Sweeney* does not explicitly teach alphabet data. *Scrub System* teaches replacing a patients name with a fictitious name. Examiner notes that the fictitious name is independent from the patients name as it “belong[s] to no known person”. Since each individual element and its function are shown in the prior art, albeit shown in separate references, the difference between the claimed subject matter and the prior art rests not on any individual element or function but in the very combination itself- that is in the substitution of alphabetic data in the *Scrub System* reference for the numeric data of the *Sweeney* patent.

Thus, the simple substitution of one known element for another producing a predictable result renders the claim obvious.

19. **As to claim 28**, see the discussion of claim 27. *Sweeney* further discloses the computer-based system wherein the characteristic comprises whether the data stream is a particular form (column 5, lines 31-61).

20. **As to claim 29**, see the discussion of claim 1, additionally *Scrub System* teaches the method wherein the alphabet portion of data comprises a first number of alphabet characters; and

wherein modifying the alphabet portion of data comprises replacing the alphabet portion of the data with a second number of replacement characters, the second number being selected independent of the first number, the replacement characters being selected independent of the alphabet characters (*Scrub System Replacement Strategies*).

21. **As to claim 32**, see the discussion of claim 1, additionally *Sweeney* discloses the method wherein modifying the portion of data comprises deleting the portion of the data (figure 5 wherein the birth month and birth day are deleted).

22. **As to claim 34**, see the discussion of claim 19, additionally *Scrub System* teaches the method wherein the alphabet portion of data comprises a first number of alphabet characters; and

wherein modifying the alphabet portion of data comprises replacing the alphabet portion of the data with a second number of replacement characters, the second number being selected independent of the first number, the replacement characters being selected independent of the alphabet characters (*Scrub System Replacement Strategies*).

23. **As to claim 35**, see the discussion of claim 19, additionally, *Sweeney* discloses the computer-based system wherein modifying the portion of the data stream comprises deleting the portion of the data stream (figure 5 wherein the birth month and birth day are deleted).

24. **As to claim 36**, see the discussion of claim 27, additionally *Scrub System* teaches the method wherein the alphabet portion of data comprises a first number of alphabet characters; and

wherein modifying the alphabet portion of data comprises replacing the alphabet portion of the data with a second number of replacement characters, the second number being selected

independent of the first number, the replacement characters being selected independent of the alphabet characters (*Scrub System Replacement Strategies*).

25. **As to claim 37**, see the discussion of claim 27, additionally, *Sweeney* discloses the computer-based system wherein modifying the portion of the data stream comprises deleting the portion of the data stream (figure 5 wherein the birth month and birth day are deleted).

26. **As to claim 38**, see the discussion of claim 29, additionally, *Scrub System* discloses the method wherein the second number of replacement characters comprises a predetermined number.

27. **As to claim 39**, see the discussion of claim 34, additionally, *Scrub System* discloses the computer based system wherein the second number of replacement characters comprises a predetermined number.

28. **As to claim 40**, see the discussion of claim 36, additionally, *Scrub System* discloses the computer based system wherein the second number of replacement characters comprises a predetermined number.

29. **Claims 9 and 26** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 7,269,578 to *Sweeney* in view of *Scrub System* and U.S. Application No. 09/866,464 to *Qamar*.

30. **As to claim 9**, see the discussion of claim 1, however, the prior art does not explicitly disclose an interactive feature between a user and the algorithm. *Qamar* discloses the method further comprising notifying a user of the portion of data which comprises patient information and suggesting options to modify the portion of data which comprises relevant information, and wherein modifying the portion of data comprises manually selecting one of the options to modify the portion of data (page 9 and 10, paragraphs [0200]-[0205]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify *Sweeney* with *Qamar* to utilize a method of parsing data, identifying in-correct text to a user, and allowing a user to manually select options to modify the data in order to create a user friendly software program easily incorporated into existing report generation software for medical data.

31. **As to claim 26**, see the discussion of claim 19, however, prior art does not explicitly disclose an interactive feature between a user and the algorithm. *Qamar* discloses the computer-based system wherein the processor notifies a user of the portions of the data stream comprising information requiring modification and suggesting alternatives for the portions of the data stream comprising the selected information requiring modification (page 9 and 10, paragraphs [0200]-[0205]).

32. **Claim 13** is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 7,269,578 to *Sweeney* in view of *Scrub System* and “HIPAA Privacy Rule and Public Health” from CDC website <http://www.cdc.gov/mmwr/preview/mmwrhtml/m2e411a1.htm> last revised on 4/11/2003.

33. **As to claim 13**, see the discussion of claim 1, however, prior art does not specifically list each type of personally identifiable information. *HIPAA Privacy Rule and Public Health* discloses the method wherein the patient information is selected from the group consisting of name, postal address, e-mail address, telephone number, social security number, and birthday (page 17, box 2).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify *Sweeney* with *HIPAA Privacy Rule and Public Health* in order to comply with HIPAA rules for the types of personally identifiable information.



***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eliza Squires whose telephone number is (571)270-7052. The examiner can normally be reached on Monday through Friday 8 am - 4 pm Eastern Standard Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Gilligan can be reached on 571-272-6770. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/E. S./  
Examiner, Art Unit 3626  
9/30/2009

/C. Luke Gilligan/  
Supervisory Patent Examiner, Art Unit 3626